



## ecology and environment, inc.

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International Specialists in the Environment

January 26, 1987

Mr. Jeff Larson  
Illinois Environmental Protection Agency  
Division of Land Pollution Control  
2200 Churchill Road  
P. O. Box 19276  
Springfield, IL 62794-9276

Dear Jeff:

As we discussed by telephone last week, the groundwater sampling for the Dead Creek/Sauget sites project is scheduled to be completed in late March. The scope of work for the project includes collecting samples at five private wells in the area. The following is a list of private well samples collected historically in the project area:

<u>Address</u>	<u>Owner</u>	<u>Date Sampled</u>	<u>Collected By</u>
101 Walnut St.	Walter Allen	9-16-80	IEPA: G. Langley
113 Edwards Pl.		9-16-80	IEPA: G. Langley
118 Edwards Pl.		9-16-80	IEPA: G. Langley
113 Judith Ln.		9-23-80	IEPA: P. McCarthy
101 Walnut St.	Walter Allen	10-02-80	IEPA: J. Kelty
24 Cahokia St.	Edward Baumeyer	3-03-82	USEPA
118 Edwards Pl.	Norman Lyerla	3-03-82	USEPA
22 Cahokia St.	Robert Hayes	3-03-82	USEPA
101 Walnut St.	Walter Allen	3-03-82	USEPA

This list represents the information that we have on file concerning private well sampling in the Sauget/Cahokia area. The owners listed are from the time that the samples were collected. As we discussed, it would be very helpful to have Keri Luly conduct a preliminary survey of these residences in order to establish which wells will be sampled. I am also checking into industries in the area that may have active wells which could be included in the sampling program. If you have any questions about this matter, please contact me.

Sincerely,

*William E. Sade for*

Dan Sewall

DS:mh/m

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IEPA-DLPC

## **EPA NEEDS BETTER RISK ASSESSMENT IN SUPERFUND HAZARD RANKING, SAYS SAB**

EPA should better assess the relative risk of Superfund sites and improve site data collection methods as part of a long-term effort to refine the hazard ranking system, says a draft report prepared by a subcommittee of the Science Advisory Board. The report, subject to revision by the full board this week, was prepared as part of an extensive review of the HRS that EPA requested. EPA is required by the Superfund Amendments & Reauthorization Act (SARA) to revise the HRS, the mechanism to evaluate sites for inclusion on the national priorities list (NPL) and make them eligible for federal funding.

SAB concluded that some problems inherent in the HRS could not be addressed on the swift timeframe the HRS revisions require. Consequently, SAB proposed long-term recommendations for subsequent revisions in addition to short-term suggestions.

SAB believes the evaluation of the relative risk of sites in the HRS score should be compared with risk assessments based on the remedial investigation/feasibility studies (RI/FS). The comparison would provide a meaningful retrospective study of the HRS and a "better understanding of the basic parameters that are important in the use of the HRS scoring model," the subcommittee said. A sampling of sites scoring both below and above 28.5 — the level triggering NPL listing — should be subject to additional data gathering.

EPA should also determine based on RI/FS studies whether the health risk posed by a site is attributable to one or a few chemicals, or to many chemicals. That study could provide a basis for selecting the number of chemicals for toxicity ranking. Agency studies to date have been limited in the types of sites represented: "A better evaluation is warranted," SAB says.

SAB calls for a more aggressive effort to improve the overall quality of data collected at sites. Standardized collection procedures exist for only a small number of substances potentially present, and expanded chemical characterization of all media, "coupled with a strong laboratory certification program, will improve not only the HRS, but all aspects of the Superfund process," SAB says.

Though SAB is "generally supportive" of the changes proposed by EPA's office of emergency & remedial response (OERR), it has included short-term recommendations to further improve the HRS. SAB says EPA should attempt to "learn from subsequent experience" to provide a better basis for future HRS revisions.

SAB argues that the current system does not sufficiently discriminate between sites of varying tox-

6

9(2) INSIDE EPA — January 15, 1988

icity and suggests that EPA move from the existing "SAX" method — which uses minimal exposure measures — to one that sufficiently uses multiple measures of toxicity. Specifically, the subcommittee is interested in acute human health effects, human cancer, non-cancer chronic disease in humans and impact on the non-human natural environment.

The subcommittee encourages EPA to tally a score based on the release potential instead of observed releases. Using information on chemical identities at the site may help calculate "order-of-magnitude" emission rates for impoundments and landfills, SAB suggests. A data requirement mandating contaminant identification by record review or direct sampling "would greatly improve the HRS' validity in all pathways," SAB adds.

To account for highest exposures that will occur closest to the site, SAB suggests EPA develop a scoring system that weighs the number of exposed people in a "ring" according to the distance from the site at which they live. The approach would weigh most heavily the nearest and most exposed population.

**People on the Move**

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